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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/981,606

DATE: 05/16/2002

TIME: 10:07:34

Input Set : A:\Nano4col.app

Output Set: N:\CRF3\05162002\I981606.raw

3 <110> APPLICANT: Rothenberg et al.  
5 <120> TITLE OF INVENTION: Mutations associated with iron disorders  
7 <130> FILE REFERENCE: 24065-004CON  
9 <140> CURRENT APPLICATION NUMBER: 09/981,606  
C--> 10 <141> CURRENT FILING DATE: 2002-10-16  
12 <150> PRIOR APPLICATION NUMBER: 09/277,457  
13 <151> PRIOR FILING DATE: 1999-03-26  
15 <160> NUMBER OF SEQ ID NOS: 30  
17 <170> SOFTWARE: PatentIn Ver. 2.1  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 2506  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
24 <400> SEQUENCE: 1

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26	caggggocgt	tgctgcgttc	acactctctg	cactacctct	tcatgggtgc	ctcagagcag	120
27	gaccttggtc	tttccttggt	tgaagctttg	ggctacgtgg	atgaccagct	gttcgtgttc	180
28	tatgatcatg	agagtgcg	tggtggagccc	cgaactccat	gggtttccag	tagaatttca	240
29	agccagatgt	ggctgcagct	gagtcagagt	ctgaaagggt	gggatcacat	gttcactgtt	300
30	gacttctgga	ctattatgga	aaatcacaac	cacagcaagg	agtcccacac	cctgcaggtc	360
31	atcctgggct	gtgaaatgca	agaagacaac	agtaccgagg	gctactggaa	gtacgggtat	420
32	gatgggcagg	accaccttga	attctgacct	gacacactgg	attggagagc	agcagaacct	480
33	agggcctggc	ccaccaagct	ggagtgggaa	aggcacaaga	ttcgggccag	gcagaacagg	540
34	gcctacctgg	agagggactg	ccctgcacag	ctgcagcagt	tgctggagct	ggggagaggt	600
35	gttttgacc	aacaagtgc	tcctttgggtg	aaggtgacac	atcatgtgac	ctcttcagtg	660
36	accactctac	ggtgtcgggc	cttgaactac	tacccccaga	acatcaccat	gaagtggctg	720
37	aaggataagc	agccaatgga	tgccaaggag	ttcgaaacct	aagacgtatt	gccccatggg	780
38	gatgggacct	accagggtcg	gataaccttg	gctgtacccc	ctggggaaga	gcagagatat	840
39	acgtgccagg	tgagaccccc	aggcctggat	cagccctcca	ttgtgatctg	ggagccctca	900
40	ccgtctggca	ccctagtcat	tgagtgcatc	agtgggaattg	ctgtttttgt	cgtcatcttg	960
41	ttcattggaa	ttttgttcat	aatattaagg	aagaggcagg	gttcaagagg	agccatgggg	1020
42	cactacgtct	tagctgaacg	tgagtgcac	gcagcctgca	gactcactgt	gggaaggaga	1080
43	caaaactaga	gactcaaaga	gggagtgcac	ttatgagctc	ttcatgtttc	aggagagagt	1140
44	tgaacctaaa	catagaaatt	gcctgacgaa	ctccttgatt	ttagccttct	ctgttcattt	1200
45	cctcaaaaag	atttcccat	ttaggtttct	gagttcctgc	atgccggtga	tccctagctg	1260
46	tgacctctcc	cctggaaactg	tctctcatga	acctcaagct	gcactagag	gcttccctca	1320
47	tttccctcgt	cacctcagag	acatacacct	atgtcatttc	atttccctatt	tttgggaagag	1380
48	gactccttaa	atttggggga	cttacatgat	tcattttaac	atctgagaaa	agctttgaac	1440
49	cctgggacgt	ggctagtcat	aaccttacca	gatttttaca	catgtatcta	tgcattttct	1500
50	ggaccogttc	aacttttctt	ttgaatcctc	tctctgtgtt	accagtaac	tcactctgtc	1560
51	ccaagccttg	gggattcttc	catctgattg	tgatgtgagt	tgacacagcta	tgaaggctgt	1620
52	gcactgcacg	aatggaagag	gcacctgtcc	cagaaaaagc	atcatggcta	tctgtgggta	1680
53	gtatgatggg	tggtttttagc	aggtaggagg	caaatatctt	gaaaggggtt	gtgaagaggt	1740

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54 gtttttttcta attggcatga aggtgtcata cagatttgca aagtttaatg gtgccttcat 1800
55 ttgggatgct actctagtat tccagacctg aagaatcaca ataattttct acctgggtctc 1860
56 tccttggttct gataatgaaa attatgataa ggatgataaa agcacttact tcgtgtccga 1920
57 ctcttctgag cacctactta catgcattac tgcatgcact tcttacaata attctatgag 1980
58 ataggtacta ttatcccat ttctttttta aatgaagaaa gtgaagtagg ccgggcacgg 2040
59 tggctcgcgc ctgtgggtccc aggggtgctga gattgcaggt gtgagccacc ctgcccagcc 2100
60 gtcaaaagag tcttaatata tatatccaga tggcatgtgt ttactttatg ttactacatg 2160
61 cacttggtctg cataaatgtg gtacaacat tctgtcttga agggcaggtg cttcaggata 2220
62 ccatatacag ctcaagaagt tcttcttttag gcattaaatt ttagcaaaga tatctcatct 2280
63 cttctttttaa accattttct ttttttgtgg ttagaaaagt tatgtagaaa aaagtaaagt 2340
64 tgatttacgc tcattgtaga aaagctataa aatgaatata attaaagctg ttatttaatt 2400
65 agccagtga aaactattaa caactgtct attacctgtt agtattattg ttgcattaaa 2460
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69 &lt;210&gt; SEQ ID NO: 2

70 &lt;211&gt; LENGTH: 348

71 &lt;212&gt; TYPE: PRT

72 &lt;213&gt; ORGANISM: Homo sapiens

74 &lt;400&gt; SEQUENCE: 2

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75 Met Gly Pro Arg Ala Arg Pro Ala Leu Leu Leu Met Leu Leu Gln
76 1 5 10 15
78 Thr Ala Val Leu Gln Gly Arg Leu Leu Arg Ser His Ser Leu His Tyr
79 20 25 30
81 Leu Phe Met Gly Ala Ser Glu Gln Asp Leu Gly Leu Ser Leu Phe Glu
82 35 40 45
84 Ala Leu Gly Tyr Val Asp Asp Gln Leu Phe Val Phe Tyr Asp His Glu
85 50 55 60
87 Ser Arg Arg Val Glu Pro Arg Thr Pro Trp Val Ser Ser Arg Ile Ser
88 65 70 75 80
90 Ser Gln Met Trp Leu Gln Leu Ser Gln Ser Leu Lys Gly Trp Asp His
91 85 90 95
93 Met Phe Thr Val Asp Phe Trp Thr Ile Met Glu Asn His Asn His Ser
94 100 105 110
96 Lys Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu
97 115 120 125
99 Asp Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp
100 130 135 140
102 His Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro
103 145 150 155 160
105 Arg Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala
106 165 170 175
108 Arg Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln
109 180 185 190
111 Gln Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln Val Pro Pro
112 195 200 205
114 Leu Val Lys Val Thr His His Val Thr Ser Ser Val Thr Thr Leu Arg
115 210 215 220
117 Cys Arg Ala Leu Asn Tyr Tyr Pro Gln Asn Ile Thr Met Lys Trp Leu
118 225 230 235 240
120 Lys Asp Lys Gln Pro Met Asp Ala Lys Glu Phe Glu Pro Lys Asp Val

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121          245          250          255
123 Leu Pro Asn Gly Asp Gly Thr Tyr Gln Gly Trp Ile Thr Leu Ala Val
124          260          265          270
126 Pro Pro Gly Glu Glu Gln Arg Tyr Thr Cys Gln Val Glu His Pro Gly
127          275          280          285
129 Leu Asp Gln Pro Leu Ile Val Ile Trp Glu Pro Ser Pro Ser Gly Thr
130          290          295          300
132 Leu Val Ile Gly Val Ile Ser Gly Ile Ala Val Phe Val Val Ile Leu
133 305          310          315          320
135 Phe Ile Gly Ile Leu Phe Ile Ile Leu Arg Lys Arg Gln Gly Ser Arg
136          325          330          335
138 Gly Ala Met Gly His Tyr Val Leu Ala Glu Arg Glu
139          340          345
142 <210> SEQ ID NO: 3
143 <211> LENGTH: 23
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
149 primer
151 <400> SEQUENCE: 3
152 cctcctacta cacatgggta agg 23
155 <210> SEQ ID NO: 4
156 <211> LENGTH: 21
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
162 primer
164 <400> SEQUENCE: 4
165 gctctgacaa cctcaggaag g 21
168 <210> SEQ ID NO: 5
169 <211> LENGTH: 22
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
175 primer
177 <400> SEQUENCE: 5
178 ggtggaaata gggacctatt cc 22
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 22
183 <212> TYPE: DNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
188 primer
190 <400> SEQUENCE: 6
191 cactctgccca ctagactata gg 22

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196 <212> TYPE: DNA
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199 <220> FEATURE:
200 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
201     primer
203 <400> SEQUENCE: 7
204 gttccagtct tcctggcaag g                                21
207 <210> SEQ ID NO: 8
208 <211> LENGTH: 22
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
214     primer
216 <400> SEQUENCE: 8
217 aaatgcttcc catgcatgcc ag                                22
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221 <211> LENGTH: 30
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
227     primer
229 <400> SEQUENCE: 9
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233 <210> SEQ ID NO: 10
234 <211> LENGTH: 20
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
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240     primer
242 <400> SEQUENCE: 10
243 gtgagtcctgc aggctgcgtg                                20
246 <210> SEQ ID NO: 11
247 <211> LENGTH: 21
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
253     primer
255 <400> SEQUENCE: 11
256 gttccagtct tcctggcaag g                                21
259 <210> SEQ ID NO: 12
260 <211> LENGTH: 22
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence

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264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
266     primer
268 <400> SEQUENCE: 12
269 aaatgcttcc catggatgcc ag                                22
272 <210> SEQ ID NO: 13
273 <211> LENGTH: 21
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
279     primer
281 <400> SEQUENCE: 13
282 gttccagtct tcctggcaag g                                21
285 <210> SEQ ID NO: 14
286 <211> LENGTH: 22
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial Sequence
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
292     primer
294 <400> SEQUENCE: 14
295 aaatgcttcc catggatgcc ag                                22
298 <210> SEQ ID NO: 15
299 <211> LENGTH: 21
300 <212> TYPE: DNA
301 <213> ORGANISM: Artificial Sequence
303 <220> FEATURE:
304 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
305     primer
307 <400> SEQUENCE: 15
308 gtgtggagcc tcaacatcct g                                21
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312 <211> LENGTH: 21
313 <212> TYPE: DNA
314 <213> ORGANISM: Artificial Sequence
316 <220> FEATURE:
317 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
318     primer
320 <400> SEQUENCE: 16
321 acaagacctc agacttccag c                                21
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325 <211> LENGTH: 22
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
331     primer
333 <400> SEQUENCE: 17

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/981,606

DATE: 05/16/2002

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Input Set : A:\Nano4col.app

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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date